

iTView DV

User's Guide

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the installation manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- This unit was tested with shielded cable. Therefore, for continued compliance, use the shielded cables provided with the unit.
- Re-orient or relocate the unit or receiving antenna.
- Increase the separation between the computer/converter and television.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You may find the following booklet helpful:

How to Identify and Resolve Radio-TV Interference Problems (stock number 004-000-000345-4)

To order the booklet, write to:

The U.S. Government Printing Office
Washington D.C. 20402

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Table of Contents

CHAPTER 1 INTRODUCTION	4
CHAPTER 2 HARDWARE INSTALLATION	9
Packing List	9
Inspecting the Equipment	10
Installing the RGB Cover on your iMac DV	10
Connecting the iView DV to a Television	13
Connecting the iView DV to a VCR	18
Functions of the iView DV LED	20
CHAPTER 3 iVIEW DV SOFTWARE	21
Installing the iView DV Control Panel Software	21
Screen Controls	22
TV Output Controls	24
Picture Setup	26
Additional Features	28
CHAPTER 4 TUNING YOUR TELEVISION	31
Brightness	32
Color	32
Sharpness	32
Tint or Hue	32
CHAPTER 5 TROUBLESHOOTING	33
Returning a Damaged or Failed iView DV Unit	35

About the User's Guide

The iTView DV User's Guide is designed to help you to quickly and easily connect the hardware and install the software for this product. The guide is divided into the following chapters:

Chapter 1: Introduction: *which describes the key features and functionality of the product and some of its many uses. The chapter also discusses the notation conventions used in the guide.*

Chapter 2: Hardware Installation: *which describes the information you should know before installing and connecting the iTView DV hardware, and the steps required to perform the installation.*

Chapter 3: iTView DV Software: *Describes the steps required to install the iTView DV software control panel and how to operate the program.*

Chapter 4: Tuning Your Television : *this chapter describes the methods you can use to tune the image on your television*

Chapter 5: Troubleshooting : *describes possible problems that you might encounter and ways to solve them..*

Notation Conventions

This user's guide uses the following conventions to specify certain types of information.



Warns you about potential problems and hazards during the installation or use of the product. Read these warnings carefully, and be sure you understand how they relate to the installation procedures before proceeding.

Note: Points out important or useful information.

Contact Information

To get information on the reseller nearest to you, to order replacement parts, or for technical support contact one of the following:

Worldwide Headquarters
1370 Dell Avenue
Campbell, CA 95008

Customer Service	800-338-3348 (U.S. Only)
Technical Support	408-370-9963

On-line:

URL : <http://www.FOCUSinfo.com>

e-mail: info@FOCUSinfo.com

Chapter 1 Introduction

The iView DV converts the VGA output from your computer into video that can be displayed on a television or recorded to a VCR. iView DV automatically detects VGA, SVGA, and XGA output frequencies up to 152Hz and synchronizes it with your television. The result is a high quality, flicker-free television display from your computer.

Features

The iView DV includes the following features:

- Screen position controls
- Variable horizontal and vertical scaling controls
- Variable zoom controls
- Image freeze control
- Brightness, Contrast, Sharpness, Flicker Filter, Color Saturation
- 2D flicker filter controls
- Easy plug-and-play installation for iMac DV personal computers
- Compatibility with any size television monitor (NTSC/PAL) with an RCA (composite), S-Video, or SCART (Europe only) input connector.
- Support for 640 x 480 (VGA), 800 x 600 (SVGA) and 1024 x 768 (XGA) resolution at frequencies up to 152Hz
- Support for 24-bit color
- TrueScale™ image compression that precisely fits the image on your television without dropping lines or altering video resolution
- Electronic Marker™ Software

Modes of Operation

The iTView DV has ability to operate in two separate modes:

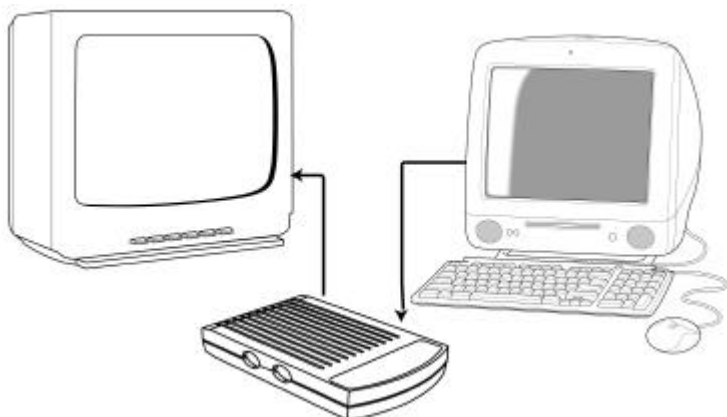


Figure 1-1: Presentation Mode

1. Presentation Mode: Display the same image on your computer and your television.

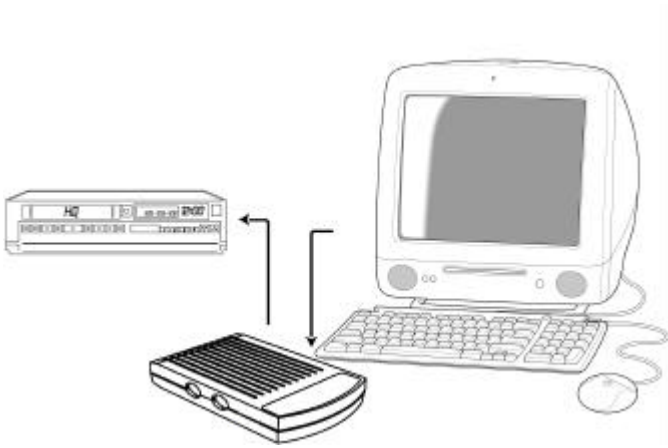


Figure 1-2: Video Record Mode

2. Video Record Mode: Record your video image or digital movie directly to your videotape.

Suggested Uses for the iTView DV

The iTView DV can be used for the following:

- Bring sales or other multimedia presentations from a laptop to a large TV
- Output your digital movies to television
- Demonstrate a new software package using a large screen TV
- Project computer games onto a TV screen
- Cruise the Internet on a television
- Conferencing via TV
- E-Mail
- Collaborating with others on computer-based projects

Specifications

Table 1: iTView DV Specifications.

Computer Compatibility	Any iMac DV
Television Compatibility	Works with any size television monitor (NTSC/PAL) with an RCA (composite), S-Video, or SCART (Europe only) input connector. For television receivers or televisions without composite or S-Video inputs, an RF Modulator is required (Radio Shack #15-1283)
Color Modes and Resolution	Supports up to 16,777,216 colors (24-bit), and up to 1024 x 768 at refresh rates up to 152Hz
Power Supply	Maximum consumption 5 volt regulated DC, 700 mA
Unit Weight	184 grams (without cables)
Unit Dimensions	12 cm x 7cm x 2.5cm

Chapter 2 Hardware Installation

This chapter describes the information you should know before installing and connecting the iTView DV hardware, and the steps required to perform the installation.

System Requirements

Before installation, the following are system requirements for the operation of the iTView DV:

iMac DV (Any Flavor)

- iMac personal computer
- Television with S-Video or Composite Video output.

Checking the Packing List

Check the packing list that is included in this manual. Compare the list with the equipment you have purchased. Be sure that you have received everything that is on the list. If anything is missing, contact FOCUS Enhancements Customer Service department by calling 1-800-338-3348.

Packing List

Your iTView DV includes the following items:

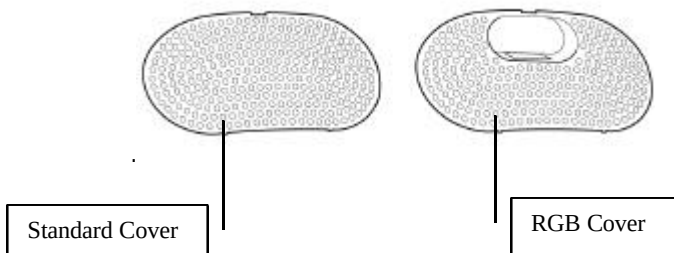
- iTView DV
 - Power adapter 5V @700mA
 - S-Video and Composite video cables (US only)
 - SCART Cable (Europe only)
 - Electronic Marker™ software
 - User's guide and Quick-Start guide (On CD ROM)
-
- iTView DV Control Panel Software

Inspecting the Equipment

Before installing and connecting the hardware, inspect it for any damage, which may have been incurred during shipment. Perform a thorough inspection, looking for dents, scratches, or loose parts. Look for anything that appears unusual or out-of-the ordinary. If any of the equipment is damaged, contact FOCUS Enhancement's Customer Service department by calling 1-800-333-3348.

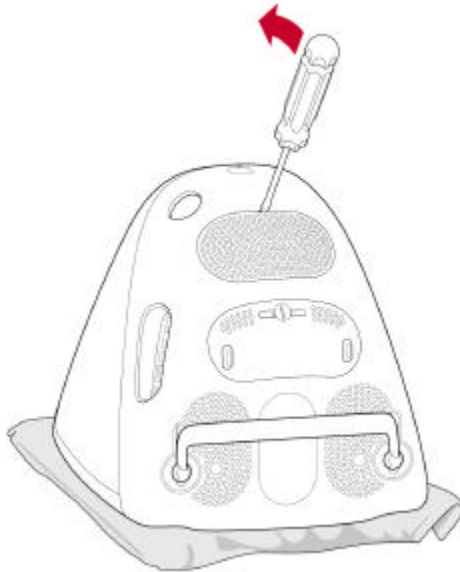
Installing the RGB Cover on your iMac DV

To obtain access to the RGB port on your iMac DV you will need to install the RGB Cover on the rear of the computer. The following outlines the procedure for removing the standard cover and installing the RGB cover.

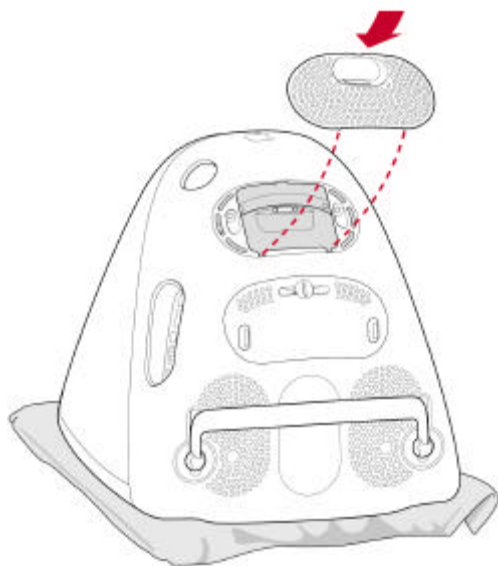


Perform the following steps to install the RGB Cover on your iMac DV:

1. Turn off your iMac and unplug the power cord from the wall. If your internal modem is connected to a telephone line, disconnect the telephone line from the modem.
2. Place a soft cloth or towel large enough to cover the front of the iMac on a desk, table, or other flat surface.
3. Carefully, place the computer, screen down, on the cloth.



4. Using a flat screwdriver, remove the panel covering the VGA connector. Refer to the image above.



5. Insert the RGB Cover into the slots on the rear of the iMac.

Connecting the iTView DV to a Television

After installing the RGB cover and connecting the RGB cable to the iMac DV, you will need to connect the iTView DV to a television or VCR. This section describes the connections available and how to use them. (If you are planning to connect to a VCR, see "Connecting to a VCR" below.) There are three possible ways to connect to a television:

- Using a composite video connection
- Using an S-Video connection
- Using a SCART cable (Europe only)

Composite Video Connection

Composite video is a connection type used by most televisions, VCRs, laserdisc players, and certain LCD panels. The connectors on a composite video cable have an RCA-type plug. The plug has a long metal pin projecting from its center and plugs into the composite video in port at the rear of the television.

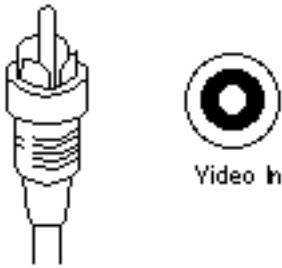


Figure 2-3: Composite Video Connectors

To determine if your television supports composite video, look for a port on your television that matches the composite video out port at the side of the iTView DV unit.

Note: The composite video port on the television may or may not be labeled "video in." The Video input jack will have a yellow center.

S-Video Connection

S-Video is a high-quality video connection used by some televisions, video cameras and VCRs. The connector on an S-Video cable has a round plug with several small metal pins. It plugs into the S-Video output port at the side of the iTView DV unit.

Note: The S-Video connection is a newer video standard. This type connection improves color, clarity, and resolution. The S-Video connection is the recommended connection to use, if present..

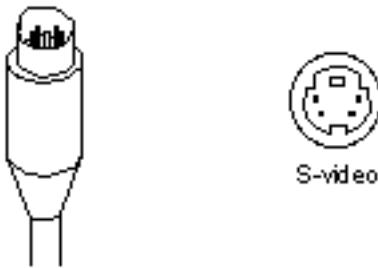


Figure 2-4: S-Video Connectors

To determine if your television or supports S-Video, look for a port at the rear of the television that matches the S-Video output port at the side of the iView DV Unit.

Note: The S-Video port on the television may or may not be labeled "S-Video in."

SCART Connection (Europe Only)

SCART is a high-quality video connection used on most televisions and VCR's in Europe. The connector on the SCART cable provided with the iView DV has two different connectors. The larger end of the cable is rectangular in shape and contains 20 small metal pins. This larger end of the cable plugs into the matching port on the television or VCR. The smaller end of the SCART cable has a round plug with several small metal pins and connects to the port labeled SCART/S-Video on the iView DV.

Additionally, the SCART connector provided with the iView DV can accept audio input from your computer. To utilize this function, connect a standard 1/8" male mini stereo cable (not included) to the female connector attached to the larger end of the SCART cable.

To connect the iTView DV unit to your television, perform the following steps:

1. Connect one end of the supplied composite video cable to the "Comp Video" port located on the side of the iTView DV unit, or connect the male end of the S-Video cable to the port on the side of the iTView DV labeled either "SCART/S-Video."
2. Connect the other end of the composite cable or S-Video cable to the Comp Video in or S-Video in port at on the television.
3. Turn the television on.
4. Plug in the power adapter for the iTView DV.
5. Turn your computer on. If the cables have been connected correctly, the image from the computer monitor should now appear on the television screen.

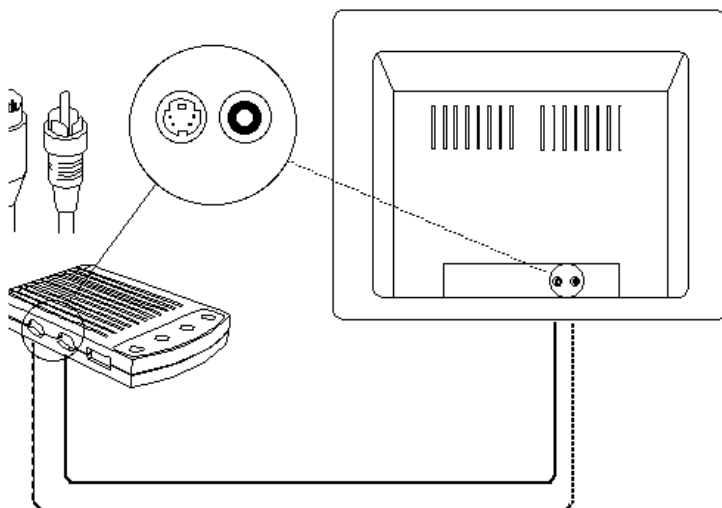


Figure 2-5: Connecting iTView DV to the Television

When you are looking at the television to make these connections, you may see an input labeled ANT IN. This input is used by cable TV companies and uses a different type of video than that used by iTView DV. It is not possible to connect directly to this input. If this is the only input available, and you do not have a VCR, this input can be used with an RF modulator. See below for further information.

Note: Because the port may not be labeled, you will need to match the port to the connector you are using.

Connecting the iTView DV to a VCR

In certain configurations, the video will be run through a VCR. Therefore the unit must be connected to the VCR. By connecting the iTView DV unit, you will also be able to record the computer screen to videotape.

To connect your iTView DV to a VCR, perform the following steps:

1. Connect one end of the supplied composite video cable to the "Comp Video" port located on the side of the iTView DV unit, or connect the male end of the S-Video cable to the port on the side of the iTView DV labeled "SCART/S-Video."
2. Connect the other end of the composite cable or S-Video cable to the port at the rear of your VCR labeled "Video Input" or "AUX-IN," "AV-IN," or "S-VIDEO IN."
3. Turn on the VCR.
4. Turn on your television and tune it to channel 3 or 4.
5. Plug in the power supply for the iTView DV.
6. Turn the computer on.
7. Find a button on the front of the VCR called "Line," "TV/Video," "Video Input," or something similar. Press the button. If the cables have been connected correctly, the image from the computer monitor should now appear on the television screen.

Note If your VCR does not have a button specifying video-in, use your VCR's remote control to find an on-screen programming system. Using the programming system to set the VCR to receive external video. If you are unsure about how to do this, refer to the VCR owner's manual.

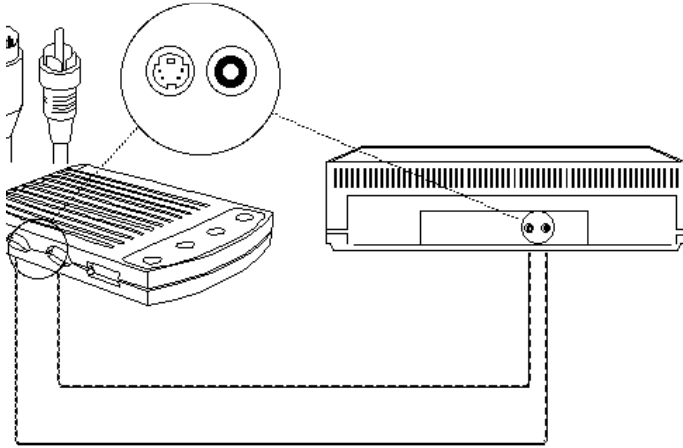


Figure 2-6: Connecting the iView DV to a VCR

Functions of the iTView DV LED

The LED located on the front of the iTView DV indicates a connection has been established between the iMac DV and the iTView DV. The LED will glow green if there is a good connection.

Chapter 3 iTView DV Software

This chapter describes how to install the iTView DV Control Panel Software which is shipped with the iTView DV. The chapter also describes how to use the software to manipulate the computer image on the television screen.

Installing the iTView DV Control Panel Software

Perform the following steps to install the iTView DV control panel on your Macintosh

1. Insert the iTView DV CD-ROM into the CD-ROM drive.
2. Open the iTView CD ROM when it appears on the desktop
3. When the CD-ROM icon appears on your desktop click on it.
4. When the CD-ROM folder opens on your desktop click on the installer file. This will install the iTView DV control panel software on your computer's hard drive.

Re-Boot your MAC. You may now access the iTView DV Control Panel via the Control Panels option under the Apple Menu.

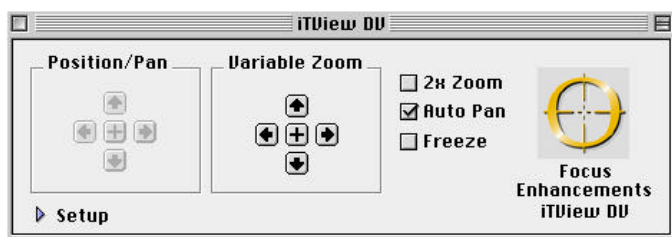


Figure 3-1 iTView DV Control Panel

Screen Controls

From the main control panel you will be able to adjust the following aspects of the computer image on the TV.

- Screen Position
- Image Zoom
- Image Freeze
- Control Strip Feature

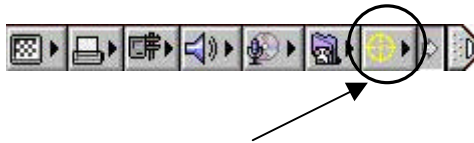
Screen Position

After powering on your iTView DV you might notice that the computer image is not centered on the television screen. Using the four directional arrow keys on the control panel you can position the computer image to fit precisely on your television.

Image Zoom

The iTView DV control panel software also gives you the ability to zoom into any area on the television screen. You have two options for zooming into an image.

- **2X Zoom:** By clicking on the 2X Zoom button you can zoom the entire screen by 2X. Once in Zoom mode use the mouse to pan in any direction on the screen.
- **Variable Zoom:** You can also zoom the image on the TV screen by using the four-directional arrow keys on the control panel. The variable zoom feature allows you to control the zoom factor for both horizontally and vertically. By clicking on the directional arrow keys you can zoom the image.



iTView DV Control Strip

- **Control Strip Feature:** By clicking on the control strip on your desktop you can obtain access to the iTView DV's control strip feature. This feature allows you to easily control 2x Zoom, Auto Pan, and freeze.

Click on the control strip with the FOCUS Crosshairs to obtain access to these features.

Image Freeze

By clicking on the image freeze check box on the control panel you can freeze the current screen on the television. While the image is frozen on the screen changes to the computer image will not be visible on the television. To advance the screen image, turn off the freeze control.

Access to Setup Controls

There are two additional menus available to you within the iView DV control panel, these are Picture Setup and TV Setup. To access these controls click on the arrow icon to the left of the word setup in the lower, left hand corner of the control panel. (refer to figure 3-1 above)

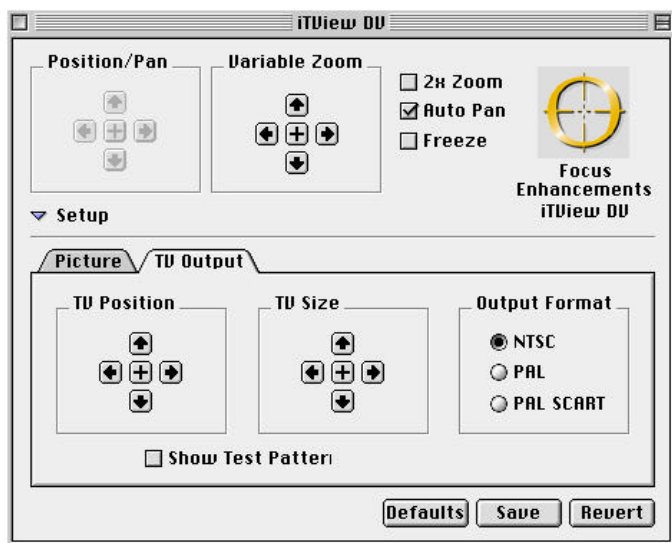


Figure 3-2 iView DV TV Setup

TV Output Controls

The TV Output screen controls the following:

- TV Position
- TV Size
- Output Format

- Test Pattern Generator

Output Format

Your iTView DV can output video in three formats. These are: NTSC, PAL, and PAL SCART. If you are located in North America, Central America, Japan, Taiwan, or Korea you will use the NTSC setting. If you are located in The UK or Europe you will need to set the control panel to PAL. If you are using a television equipped with a SCART input you will need to set the control panel to PAL SCART. (see Figure 3-2 above)

TV Position/TV Size/Test Pattern Generator

The iTView DV fits your computer image on the television screen by setting that image into a user-defined window. You have the ability to set the size and position of this window. This control should only need to be set once. The parameters you set will be saved for the next time you use the iTView DV.

Note: The setting you choose may need to be adjusted if you connect a different television to the system.

The fastest way to set these controls is to click on the "Show Test Pattern" button first. (see figure 3-2 above) After clicking on the test pattern button the iTView DV will project a test pattern on your television. This test pattern will enable you to easily adjust screen positioning, screen sizing, and all color adjustments.

Once the test pattern is on the television, use the arrow buttons on the control panel to size and position the computer image on the

television screen.

Saving your Settings

Once you have set the TV Output Format and adjusted the sizing and positioning of the computer image you can save your settings by clicking on the "Save" Button on the control panel. After clicking on this button, your preferences will be saved until you choose to change them and click on the save button again.

If you are unhappy with your settings and would like to go back to your last saved set of preferences simply click on the "Revert" key on the control panel. This will set all user-definable preferences back to your last saved setting. If you would like to set all controls to the factory default click on the button marked "Defaults".

Picture Setup

After setting your user preferences for the TV Setup you will want to adjust the quality of the image on the television screen. You will need to click on the folder tab labeled "Picture" to access the picture adjustments.

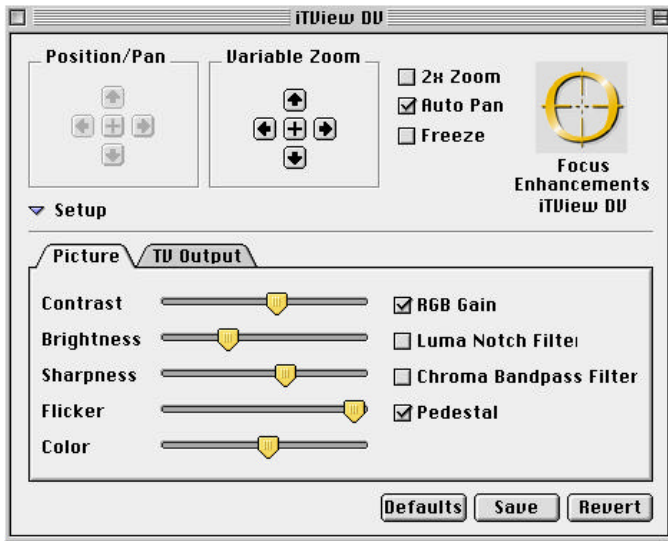


Figure 3-3 iTVView DV Picture Adjustments

After clicking on the Picture tab you will see the controls which will allow you to adjust the following aspects of the computer image on the TV:

- Contrast
- Brightness
- Sharpness
- Flicker Filter
- Color (Color Level)

Contrast/Brightness/Sharpness

Adjusting the Contrast, Brightness, and Sharpness of the computer image on the television is very simple. The slider bars on the control panel can be “grabbed” by hovering over the desired control with the

cursor and holding down the mouse button. After grabbing the slider control with the mouse you can increase Contrast, Brightness, or Sharpness by dragging the slider to the right. To decrease Contrast, Brightness, or Sharpness drag the appropriate slider to the left. See Figure 3-3 above.

Additional Features

There are four additional controls you can manipulate within this section of the iTView DV Control Panel. These are:

- RGB Gain
- Luma Notch Filter
- Chroma Bandpass Filter
- Pedestal

These controls are intended for specific situations, these situations are outlined below.

RGB Gain

By clicking on the RGB gain button you will optimize the output from the iTView DV for SCART output. If you are in Europe and using the PAL/SCART connection you will be able to improve the quality of the image by clicking the RGB Gain button.

Luma Notch Filter

The Luma Notch Filter is intended to isolate a certain video frequency present in all video signals that may cause distortion in the image. By clicking the Luma Notch Filter on you will see an improved picture on many TVs not equipped with this type of filter already.

Chroma Bandpass Filter

The Chroma Bandpass filter is much like the Luma Notch Filter, in that the filter is designed to isolate a specific video frequency. However, the Chroma Bandpass filter works only when you are outputting to composite video. If you are using a composite video connection, you will see an improvement in the computer image on the TV.

Pedestal

If you are in the United States, you should turn pedestal on. Your North American television set is designed to operate this way.

If you are in Japan, you will need to turn this feature off.

Saving your Settings

Once you have set the TV Output Format and adjusted the sizing and positioning of the computer image you can save your settings by clicking on the "Save" Button on the control panel. After clicking on this button, your preferences will be saved until you choose to change them and click on the save button again.

If you are unhappy with your settings and would like to go back to your last saved set of preferences simply click on the "Revert" key on

the control panel. This will set all user-definable preferences back to your last saved setting. If you would like to set all controls to the factory default click on the button marked "Defaults".

Chapter 4 Tuning Your Television

This chapter describes the methods you can use to tune the image on your television.

Using Your Television's Video Settings

Picture quality varies from television to television. To obtain the clearest and sharpest picture from your television, it is important to spend some time adjusting the television's video settings. The following are some suggestions for tuning the video output you see on the screen.

Note: The items listed below are general tips for all televisions. Most televisions have one or more of the controls listed. However, the results of adjusting these items depend on your specific television.

Note: Depending on the model of the television, the image is adjusted using buttons or on-screen programming. Check your owner's manual to determine how the image is adjusted on your television.

Brightness

The Brightness adjustment on the television adjusts the brightness levels of black areas of the picture. Raise or lower the brightness until the picture appears bright without a "blooming" effect. The sides of the picture should be straight, not curved or bowed.

Color

The color adjustment on the television adjusts the intensity of the colors in the picture. Adjust the color control until the picture is clear and has a minimal amount of "color-bleeding." If the color is turned up too high, the color will be over-saturated.

Sharpness

The Sharpness adjustment on your television adjusts the clarity of the edges around objects for the clearest picture quality. The general rule when adjusting sharpness is to turn it up anywhere from its middle to highest level.

Tint or Hue

The Tint or Hue adjustment on your television adjusts the color of the flesh tones to more green or red. The most effective way to use this adjustment is to display row or column of colors side-by-side and then adjust them until the color appears correct to you.

Chapter 5

Troubleshooting

This chapter describes possible problems that you might encounter and ways to solve them.

Problem	Possible Causes/Solutions
No video from the iTView DV	• Check the connection from the computer's video output port to the VGA in port at the rear of the TView unit. • Check the connection from the comp video out port or S-Video out port to the input on your monitor or VCR. • Ensure that the TV or VCR is ON. • Check the connection from the power supply. Is the TView unit plugged in? Is the LED ON and green? • Ensure that your television or VCR has been configured to accept auxiliary video input. • Ensure that the iTView DV is connected to the appropriate video connector on your TV or VCR. At the TV or VCR end, the cable should be connected to the VIDEO IN, or AUX IN port.
Flicker, or other distortion on your screen	• Use of an RF modulator may cause image quality problems. If at all possible, avoid those devices that convert the iTView DV signal into an antenna signal.

Colors are poor quality or non-existent	• Adjust the color controls on the iTView DV control panel. • Adjust the brightness and contrast control of the iTView DV in the Control Panel Software. • Use of an RF modulator may cause image quality problems. If at all possible, avoid those devices that convert the iTView DV signal into an antenna signal.
TV image overshoots or fails to fill the screen	• Use the iTView DV's horizontal and vertical controls to adjust positioning. • Adjust the iTView DV's TV size control to the appropriate setting.
Green LED does not light	• Check power connections. • Check software configuration (if the iTView DV is not communicating with the software control panel, the controls will be grayed out. • Possible power supply or iTView DV failure.
iTView DV failure	• Inspect the iTView DV unit for signs of damage (i.e. broken pins, severed wires, etc.).

Returning a Damaged or Failed iTView DV Unit

To return a iTView DV unit, follow these steps:

1. Contact FOCUS Enhancements Technical Support at 1-408-370-9963. A representative is available from 8:00 AM to 5:00PM Pacific Standard Time (PST). Explain the nature of the problem and any evidence of damage you may have found. The customer representative will either assist you with the specific problem or give you a Return Materials Authorization Number.

Note: No goods will be accepted for warranty repair or return without an RMA number.

2. Pack the iTView DV carefully. If possible, use the original shipping package. Send the package pre-paid and insured via United Parcel Service (UPS) or US Mail to:

FOCUS Enhancements
ATTN: RMA# (Your RMA Number)
1370 Dell Avenue
Campbell, CA 95008

FOCUS Enhancements will repair or replace your iTView DV within 5-15 working days. For units not covered under the 1 year warranty, or where the warranty has been voided, we charge a minimum fee of \$90.00.